

PROPOSED NEW CLAIMS

I CLAIM:

- Rule 126*
37 CFR 1.126
- 13* 12. A receiver circuit comprising:
- a) an antenna for receiving a modulated carrier signal at a modulation frequency;
 - b) a transistor connected to the antenna and configured to operate as a detector of modulation of the carrier signal;
 - c) a resonator circuit connected to the transistor and configured such that the transistor simultaneously self-oscillates at substantially the modulation frequency;
 - d) an oscillator quenching means for periodically quenching oscillation of the transistor; and
 - e) means for sensing characteristics of a build-up of oscillation to indicate a presence of the modulated carrier signal.
- 14* 13. The receiver circuit according to claim 12, in which the oscillator quenching means quenches the oscillation of the transistor when a magnitude of the oscillation reaches a selected magnitude, and in which the means for sensing measures a time between quenching of the transistor to indicate the presence of the modulated carrier signal.
- 15* 14. The receiver circuit according to claim 13, in which the selected magnitude is a point at which oscillator compression of the transistor occurs.
- 16* 15. The receiver circuit according to claim 12, in which the oscillator quenching means quenches the oscillation of the transistor at regular time intervals, and in which the means for

sensing measures a magnitude of the oscillation over at least one of the time intervals to indicate the presence of the modulated carrier signal.

17 16. The receiver circuit according to claim 12, in which the transistor comprises a field effect transistor.

18 17. The receiver circuit according to claim 16, in which the oscillator quenching means quenches the oscillation of the field effect transistor by varying a drain source current.

19 18. The receiver circuit according to claim 12, in which the resonator circuit comprises a ceramic resonator.

20 19. The receiver circuit according to claim 12, in which the resonator circuit comprises a quartz crystal.

21 20. The receiver circuit according to claim 12, in which the resonator circuit comprises a network of at least one of a capacitor and an inductor.

22 21. The receiver circuit according to claim 12, and further comprising a matching network between the antenna and the transistor.

23 22. The receiver circuit according to claim 12, in which the modulated carrier signal is at least one of a frequency and a phase modulated carrier signal, and further comprising a narrowband filter for converting the at least one of the frequency and the phase modulated signal to an amplitude modulated signal before the modulated carrier signal is applied to an input of the transistor.